Before the
Federal Communications Commission
Washington, D.C. 20554

In the matter of	)	
	)	
Amendment of Part 97 of the Commission's	)	
Rules Governing the Amateur Radio Service	)	RM-11306
Concerning Permitted Emissions and	)	
Control Requirements	)	

COMMENT

This comment is being filed in regard to a Petition for Rule Making as filed by the American Radio Relay League (ARRL), proceeding RM-11306.

I am in agreement with the ARRL's petition that experimentation by amateur radio operators with digital modes should be embraced under Part 97 and that the rules, in their current form, are restrictive and potentially inhibit experimentation in digital modes by amateur radio operators. The most restrictive part seems to be in regard to what makes a digital mode "public" so that one cannot construe that the amateur radio operator is using digital codes or ciphers to obscure the meaning of the message. I would recommend that The Commission relaxes the existing wording, or add wording, to allow for experimentation in the digital modes.

Should The Commission deny the ARRL's petition and retain the current wording of Part 97, I would recommend the solicitation for an appointment of a "clearinghouse" that would be a single source to make all of the digital modes officially public. A recommended form would be a web site that would post a copy of the software program and operational parameters for decoding the digital signal. Digital modes would not be considered "public" and may not be used until they are posted on that web site.

I am in disagreement with the ARRL's petition to regulate the bands by emission bandwidth, rather than emission mode. It is currently a common practice for amateur radio operators to search for similar signals my mode. Therefore, if an amateur radio operator were seeking to make contact with another amateur via SSB, the amateur would search the appropriate portion of the band for voice emissions and steer clear from the data and CW portions of the band. A more organized approach than what is outlined in the ARRL's petition would be favorable, such as dividing the voice band into digital voice and analog voice sub-bands. Another possible recommendation would be to instead regulate the data band into sub-bands by bandwidth. Even if the CW and/or voice portions of the band need to be down-sized somewhat to accommodate a larger digital mode portion of the band, keeping the bands regulated by emission mode is more organized and unobtrusive. Under the ARRL's petition, digital transmissions – both data and voice - could be randomly interspersed with analog voice transmissions in a disorganized, and possibly obtrusive, fashion.

I am in disagreement with the ARRL's petition to allow wide band data on all amateur radio bands from 160 meters through UHF (440 MHz band). In regard to

the VHF/UHF/SHF bands, there are some amateur radio allocations that are under-utilized, and some that are over-utilized. The over-utilized VHF band would not be a suitable allocation for wide-band digital data transmissions. The first concern is for the amount of spectrum that these emissions would occupy. Under the ARRL's petition, digital emissions could occupy up to 100 kHz of spectrum through a significant portion of this already congested band. The second concern would be the potential for RF over-exposure due to the high duty cycles that data emissions would require should multimedia be transmitted over the band, as the ARRL proposes. The VHF (144 MHz) band is an existing cause for concern in regard to RF exposure even with low duty cycles. High duty cycles would exacerbate this concern – especially if multimedia over the RF channel becomes popular. Should digital communications be allowed on VHF, it would be recommend that strict power and/or duty cycle limitations be imposed. Experimentation with, and the use of, digital modes should be steered to the 50 MHz, 220 MHz, 900 MHz through SHF, as well as the relatively under-utilized portions of the 440 MHz band. The wider emissions could be supported on these bands in an unobtrusive fashion.

In regard to HF, I would disagree with the use of the wide digital emissions on the more popular voice and CW HF bands, and recommend steering more of the wide band digital communications towards the 75, 17, 15, and 12-meter bands. In regard to the popular bands (160, 80, 40, and 20-meters) I would recommend that The Commission segregate the digital portions of these bands into sub-bands based on bandwidth, as discussed earlier in this comment.

The ARRL's petition is much too radical in this early stage of digital voice and data use in the amateur radio allocations. The uncertainty regarding the future use of these modes is pointed out by the ARRL in paragraph two, part "B" of their proposal, stating that "it is impossible to tell now where this shift may lead." Therefore, a more measured approach for initially allowing more digital experimentation through the relaxation or re-wording of portions of Part 97 is encouraged. Then, if the popularity of the digital modes flourishes, the bands within the amateur radio allocations for digital modes can be expanded while allocations for potentially less used modes can be contracted.

Respectfully submitted this 18th day of January, 2005,

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